

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
22 July 2004 (22.07.2004)

PCT

(10) International Publication Number
WO 2004/061057 A1

(51) International Patent Classification⁷: **C10M 105/18, 107/34, 129/16, 145/32, 145/34, C07C 43/13**

(21) International Application Number:
PCT/US2003/036518

(22) International Filing Date:
14 November 2003 (14.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/434,104 17 December 2002 (17.12.2002) US

(71) Applicant (for all designated States except US): **DOW GLOBAL TECHNOLOGIES INC. [US/US]; Washington Street, 1790 Building, Midland, MI 48674 (US).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MCGRAW, Philip, W. [US/US]; 57 Raintree Court, Lake Jackson, TX 77566 (US). WHITMARSH, Robert, H. [US/US]; 11 Cherokee Trail, Elkview, WV 25071 (US). GEIGER, Rene [CH/CH]; Nidelbadstrasse 14, CH-Ruechlikon 8803 (CH).**

(74) Agent: **KARADZIC, Dragan, J.; The Dow Chemical Company, P.O. Box 1967, Building 1790, Midland, MI 48641-1967 (US).**

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/061057 A1

(54) Title: TRACTION FLUID COMPOSITION

(57) **Abstract:** Novel traction fluid compounds represented by the following formulae AB_n (I) wherein A is a residue of a compound having from 1 to 10 active hydrogen atoms, B is a residue of a cycloalkene oxide having from 4 to 12 carbon atoms, or a cycloaliphatic epoxide having from 4 to 12 carbon atoms, and n is 1 to 10, with the proviso that n can be less than the number of active hydrogen atoms in compound A, and process for the preparation thereof are disclosed. The compounds are useful as traction fluid applications either per se or in blends with known lubricating compositions due to their high traction coefficients.